

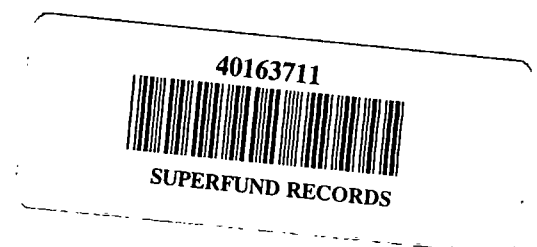
Saint Louis Army Ammunition Plant
Early Transfer Brief
March 3, 2004
(10:00 Harry S. Truman Bldg. Room 400)

07YX
St. Louis AAP
MO4210021222
310
SBC 3.3.04

- I. WELCOME/INTRODUCTIONS - Ruben Zamarripa
- II. OPENING REMARKS

Stephen Mahfood - Department of Natural Resources
Major Roberson - The Army
John Robinson - General Services Administration
Otis Williams - St. Louis Development Corporation
Tom Lorenz - EPA Region VII

- III. ROLE OF GENERAL SERVICES ADMINISTRATION
John Robinson/GSA
- IV. ENVIRONMENTAL INVESTIGATION RESULTS AND SITE RISKS
Jerry Preston/Army
- V. THE EARLY TRANSFER OF THE ST. LOUIS ARMY AMMUNITION
PLANT - John German/Army
- VI. OTHER PERSPECTIVES (Saint Louis, EPA...)
- VII. QUESTIONS...
- VIII. NEXT STEPS
- IX. CLOSING REMARKS



**Saint Louis Army Ammunition Plant
Early Transfer Brief
March 3, 2004
(10:00 Harry S. Truman Bldg. Room 400)**

I. WELCOME/INTRODUCTIONS - Ruben Zamarripa

II. OPENING REMARKS

Stephen Mahfood - Department of Natural Resources

Major Roberson - The Army

John Robinson - General Services Administration

Otis Williams - St. Louis Development Corporation

Tom Lorenz - EPA Region VII - *Served in a support role*

III. ROLE OF GENERAL SERVICES ADMINISTRATION

John Robinson/GSA

IV. ENVIRONMENTAL INVESTIGATION RESULTS AND SITE RISKS

Jerry Preston/Army

V. THE EARLY TRANSFER OF THE ST. LOUIS ARMY AMMUNITION
PLANT - John German/Army

VI. OTHER PERSPECTIVES (Saint Louis, EPA...)

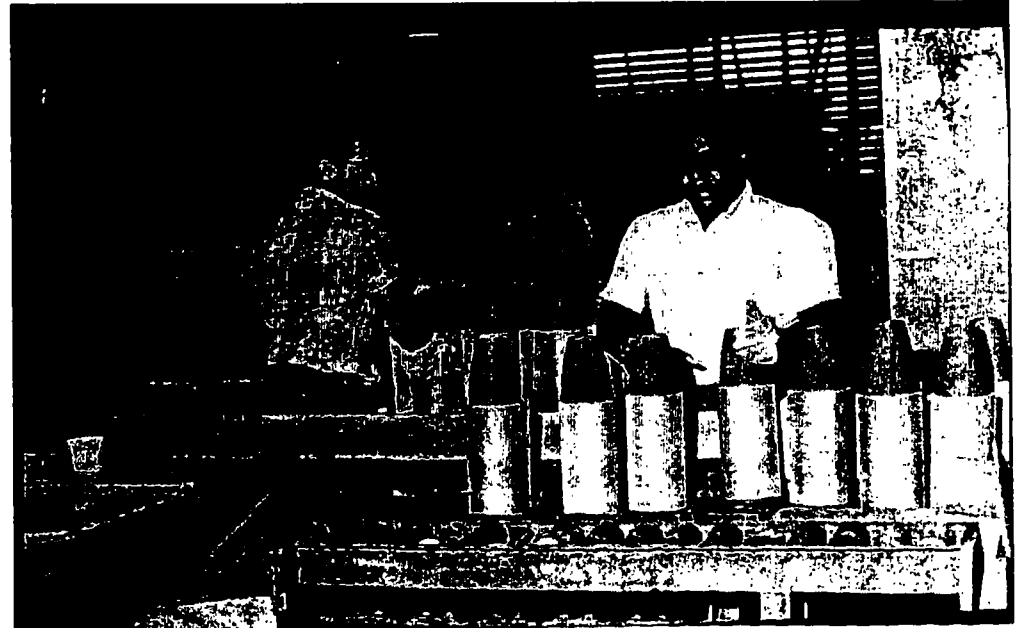
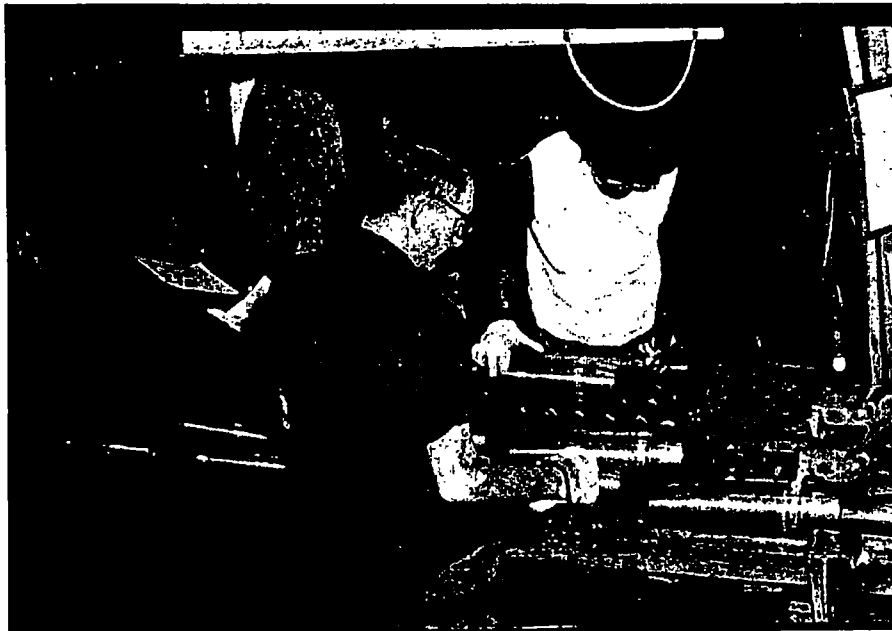
VII. QUESTIONS...

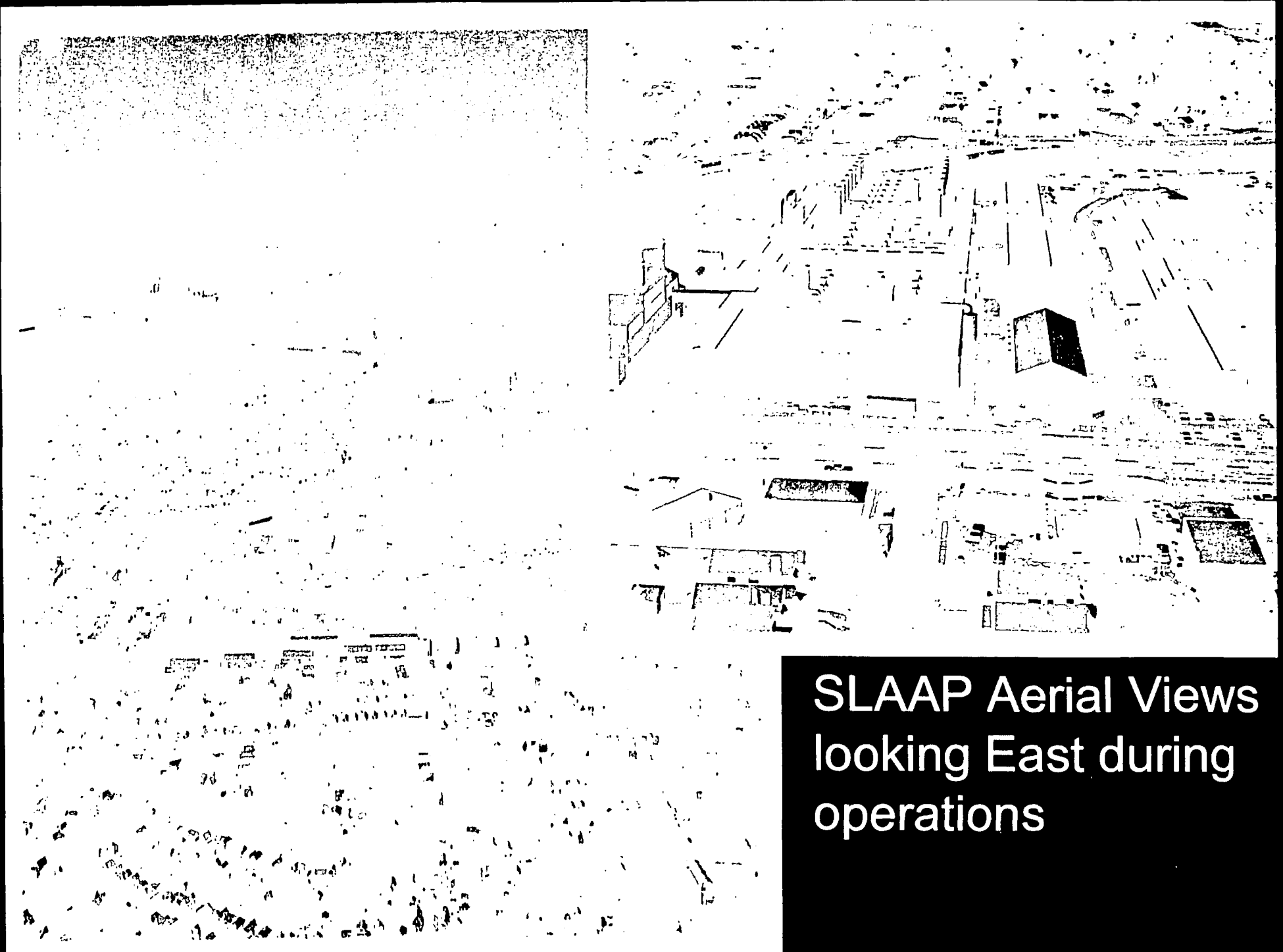
VIII. NEXT STEPS

IX. CLOSING REMARKS

ST. LOUIS ARMY AMMUNITION PLANT

REMOVAL ACTIONS
ENVIRONMENTAL BASELINE SURVEYS
BASELINE HUMAN HEALTH RISK ASSESSMENT





SLAAP Aerial Views
looking East during
operations

SLAAP HISTORICAL REVIEW

- 1941 – St. Louis Ordnance Plant (SLOP) constructed to manufacture 0.30 caliber munitions
- 1944 – SLAAP was a designated area of SLOP to manufacture 105 Howitzer shells (Contract - General Motors, Chevrolet Motor Division until 1972)
- 1946 – After WW II, SLAAP was placed on stand-by status
- 1951 – 1956 SLAAP reactivated for Korean War
- 1956 – Place on stand-by status
- 1966 – 1969 SLAAP reactivated for Southeast Asian Crisis
- 1969 – Place on stand-by status
- 1972 – SLAAP was place in layaway status
- 1984 – SLAAP admin buildings renovated for AVSCOM (1986-1990)
- 1989 – Production equipment was removed
- 1998 – SLAAP was declared excess by the Army

OBJECTIVES

TECHNICAL PRESENTAION

- Removal Actions
- Investigation Efforts
- Environmental Risk Analysis

Document Summary

- Removal Actions
 - Demolition of Bldg 3 and Soil Removal
 - Notice of Noncompliance (NON) for PCBs in 1991
 - PCBs Investigation
 - Removal Actions
- Investigations
 - Environmental Baseline Survey (EBS) - Dec. '00
 - Investigation Activities
 - Areas for Further Investigation
 - Site Specific EBS (SSEBS)
 - Work Plan developed from EBS information
 - Field Investigations Areas and Sample Synopsis
 - Regulatory comments received and responses generated
 - Final issued 25 Feb 04
- Risk Analysis
 - Baseline Human Health Risk Assessment (BHHRA)
 - Developed risk evaluation of contamination to humans
 - “Hotspots” were identified around the site
 - Regulatory comments received and responses generated
 - Final to be issued early Mar 04

Remedial Activity for Building 3

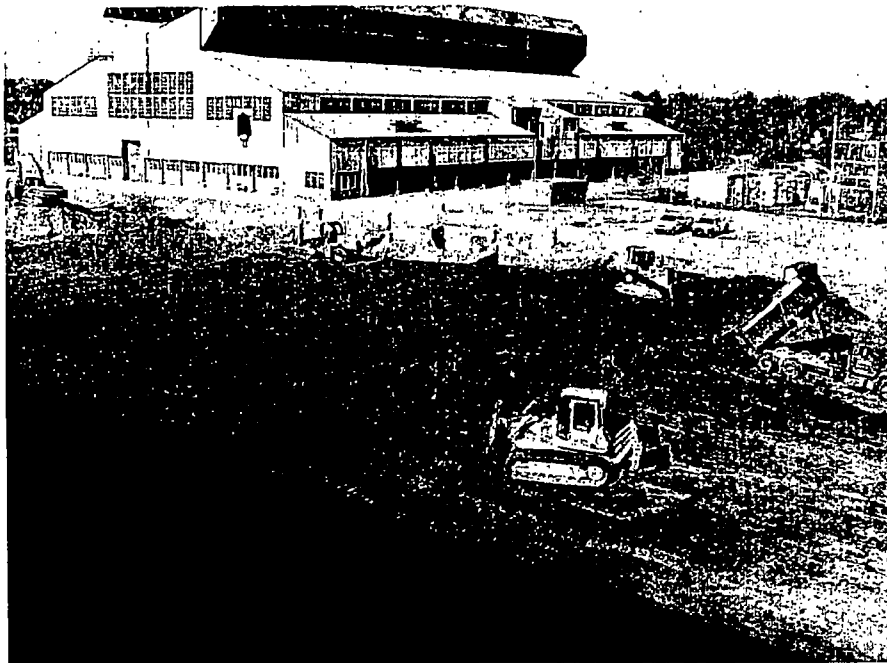
- NON for PCBs issued in Feb 91 under TSCA
- PCBs detected in building concrete and soil beneath the building foundation
- Best alternative for NON removal and facilitate Transfer - Removal of Bldg 3 and foundation soil
- \$5M Funding by Army with Congressional mandate
- Demolition completed Jan 03; Site restoration completed May 03
- NON lifted in Dec 02 12/19/02

Building 3 Remedial Action



3/2/2004

Building 3 Remedial Action



3/2/2004

Review of Comprehensive EBS

(Investigation Activities)

- Historical Records Search
- Asbestos Containing Material (ACM) survey
- Investigation Media
 - Soil Borings
 - GW Monitoring Wells
 - Equipment Wipes
 - Sediment
 - Surface Soil
 - Wastewater
 - Sumps
 - Concrete Flooring



Comprehensive EBS Evaluation

(Areas Requiring Further Investigation)

- Site Wide
 - Sewer System
 - UST areas
 - Transformers
 - Metal storage areas
 - Sumps
 - Groundwater
- Buildings
 - 1, 2, 3, 4, 5 & 6



SSEBS Work Plan

- Objectives for the Data Collected
- Mechanism to Select Chemicals of Potential Concern (COPCs)
 - Screening Levels (SLs) established for result comparison
 - Concentration > SL = risk evaluation process
- Data Quality and Usability
 - QA/QC Procedures
 - Data Requirements for the Human Health Risk Assessment
- Reporting Requirements
- Schedule

SSEBS

Field Investigation Areas

Initial Field Work August/September 2002
Contingency Sampling Program April/May 2003

- Regional Background Soils for Metals & PAHs
- Soil near Buildings 1, 2, 4, 5, 6, 7, [8], & [10] (Soils under Buildings 3 removed under PCB Remediation Program)
- NE Parking Area
- Railroads
- Roadways
- Sewer System
- Groundwater



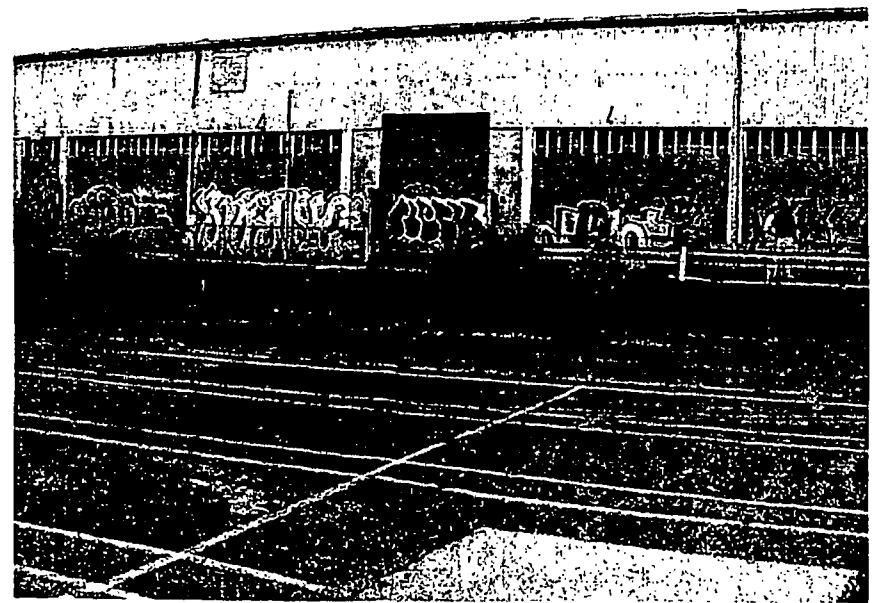
SSEBS

Field Investigation Activities

Synopsis of Samples Collected

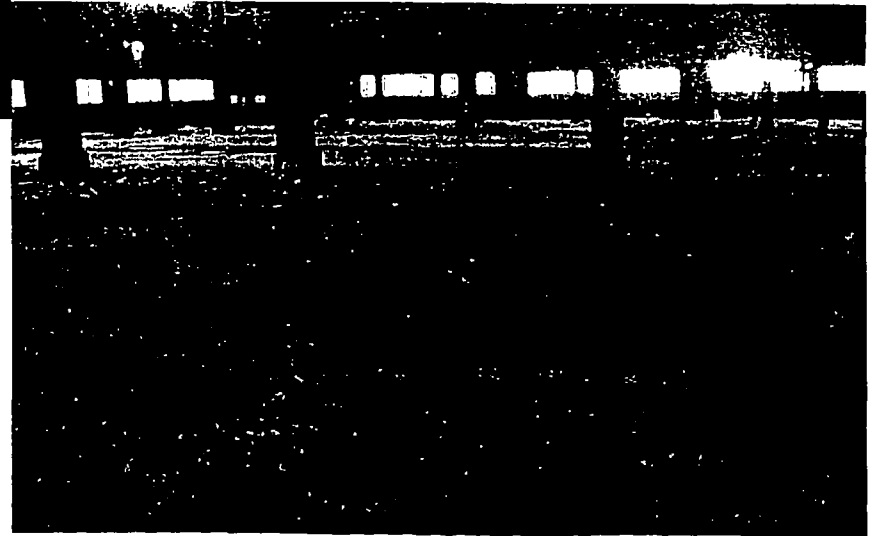
- Soil samples from boring locations (296)
- Regional Background soil samples from off-site locations (10)
- Ground Water Samples
 - newly installed monitoring wells (4)
 - existing monitoring wells (9)
- Asbestos samples from Refractory Bricks in Bldg 2 (20)
- Concrete floor samples from Buildings 1, 2 & 4 (18)
- Mastic samples from flooring in Buildings 5 & 6 (6)
- Sediment samples (6 from site sewers, 2 from pipe tunnels)
- Surface Wipe samples (11)
- Wastewater samples from site sewers (10)

Building 1



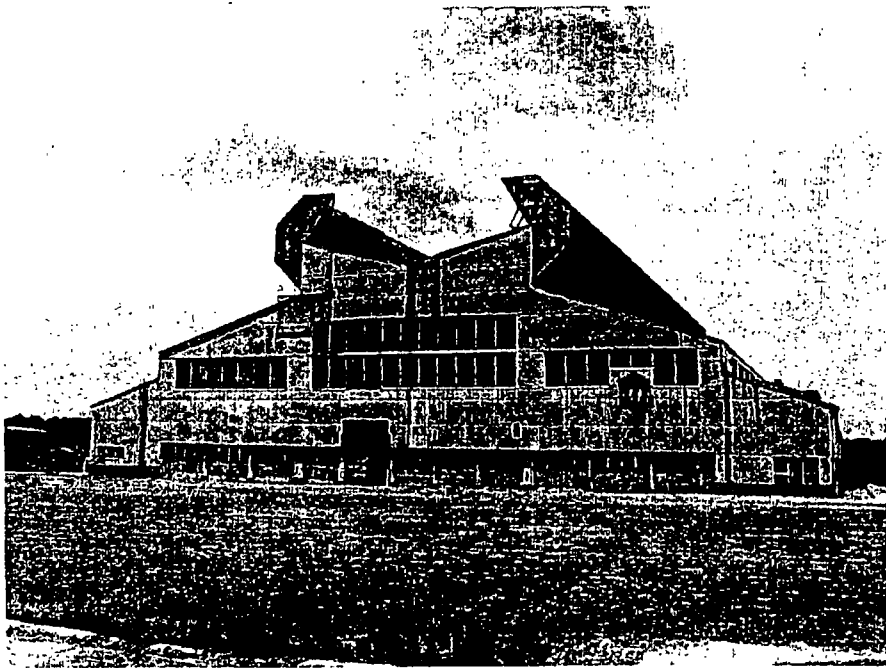
3/2/2004

Building 2

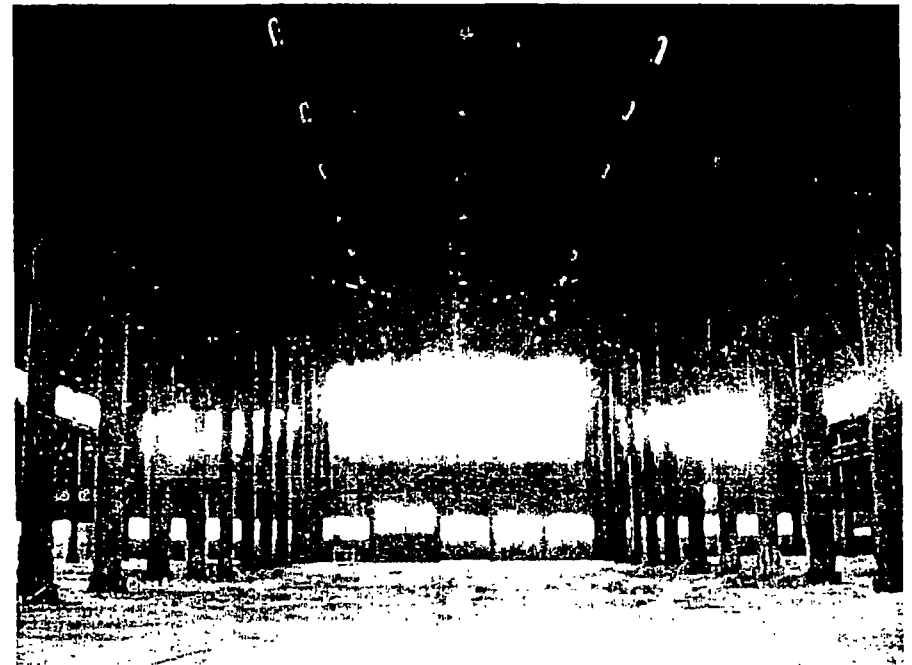


3/2/2004

Building 2

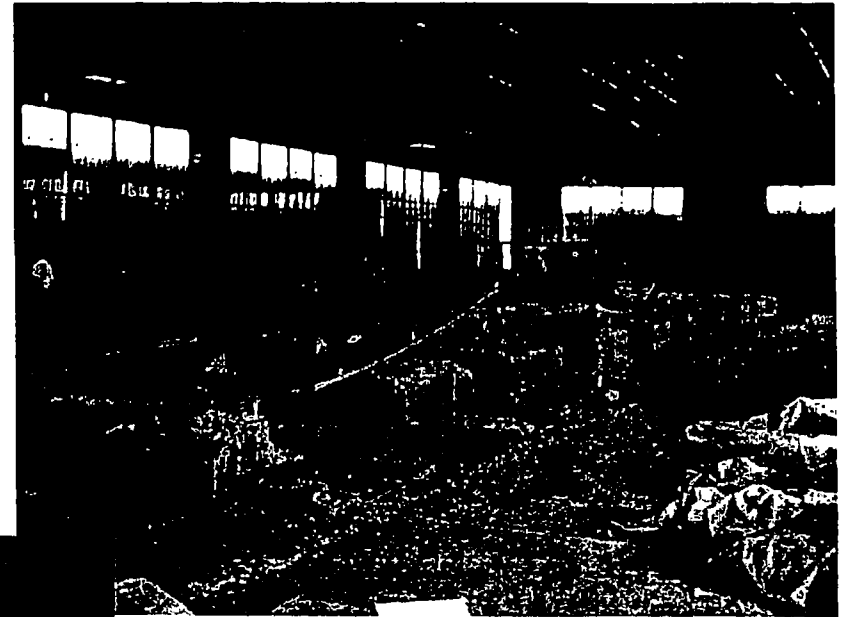
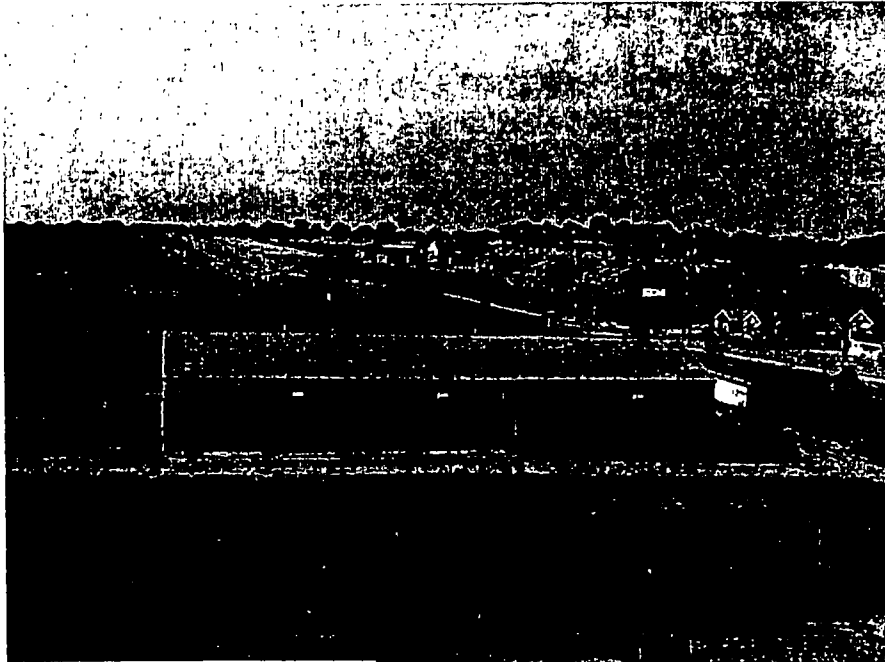


South side of Building 2
facing north



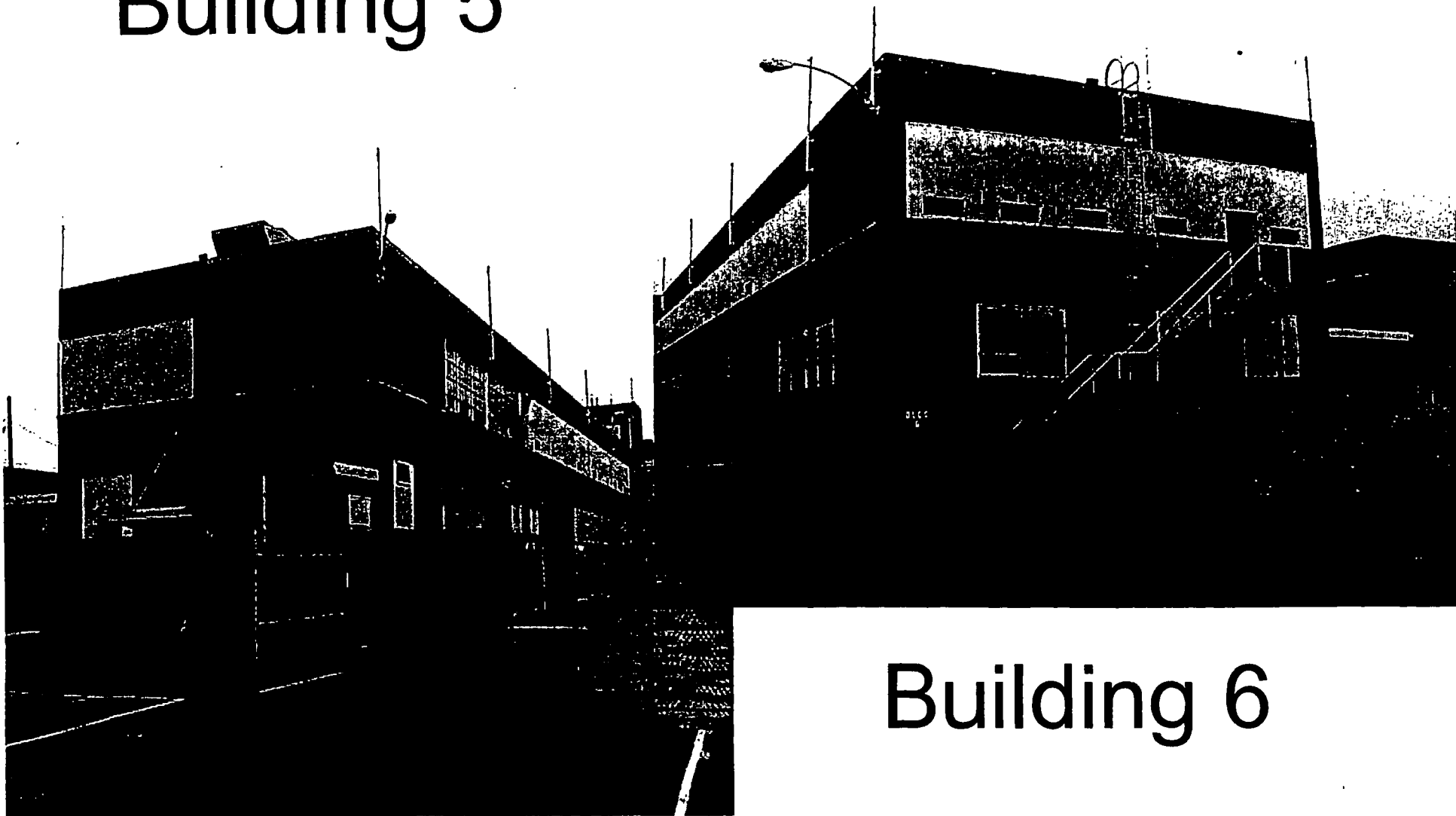
Center area of Building 2
facing north

Building 4



3/2/2004

Building 5



Building 6

3/2/2004

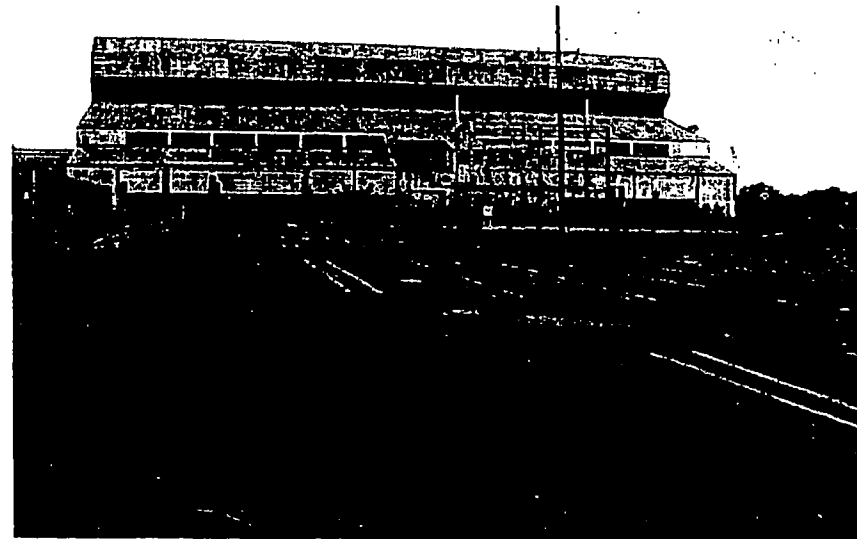
Building 7



Additional Risk Assessment Areas

Northeast Parking Area

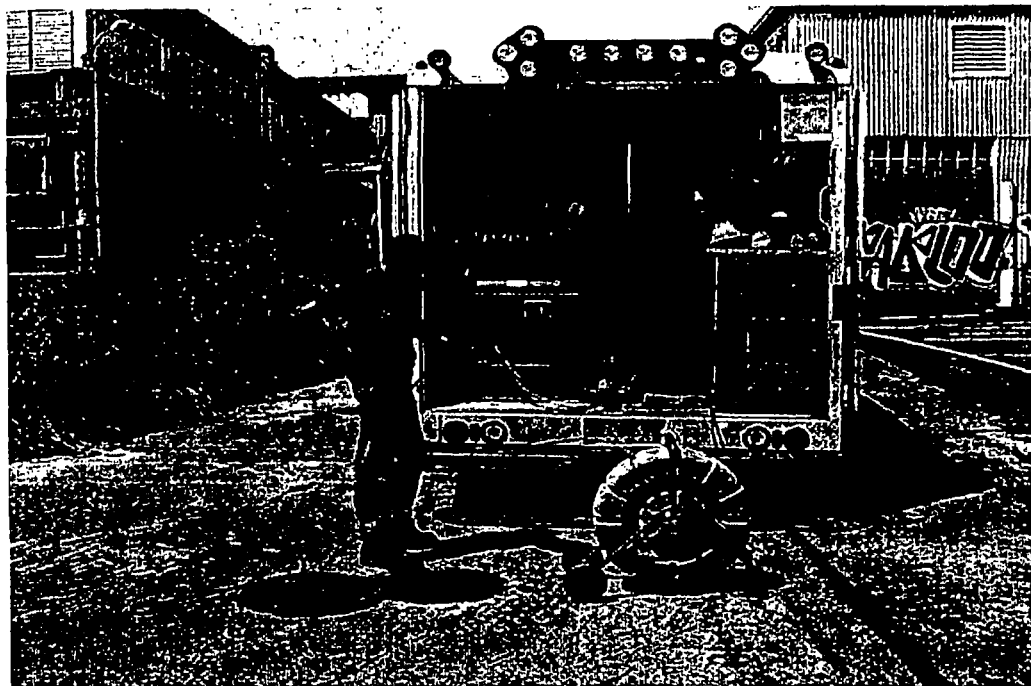
Railroads



3/2/2004

This page
intentionally left
Blank

Sewer System Survey



Sediment and Wastewater samples

SSEBS Report

Summary and Conclusions

- Contamination in selected areas will require additional investigation to fully define the nature and extent.
- No water bearing units were apparent during installation of the four new monitoring wells.
- Low permeability clay soils exist at the site.
- Groundwater has not been fully characterized, but appears to have perched water on clay lenses.
- Groundwater detections > SLs in 13 MWs (As and PAHs)
- Pesticide residues were found in soil under Bldg 5.
- The concrete floor and soil of Bldg 2 contain PCBs.
- Investigation areas addressed in the SSEBS are discussed in the Baseline HHRA.
- Other small areas of contamination “hotspots” were identified and evaluated during the risk analysis.

Baseline Human Health Risk Assessment

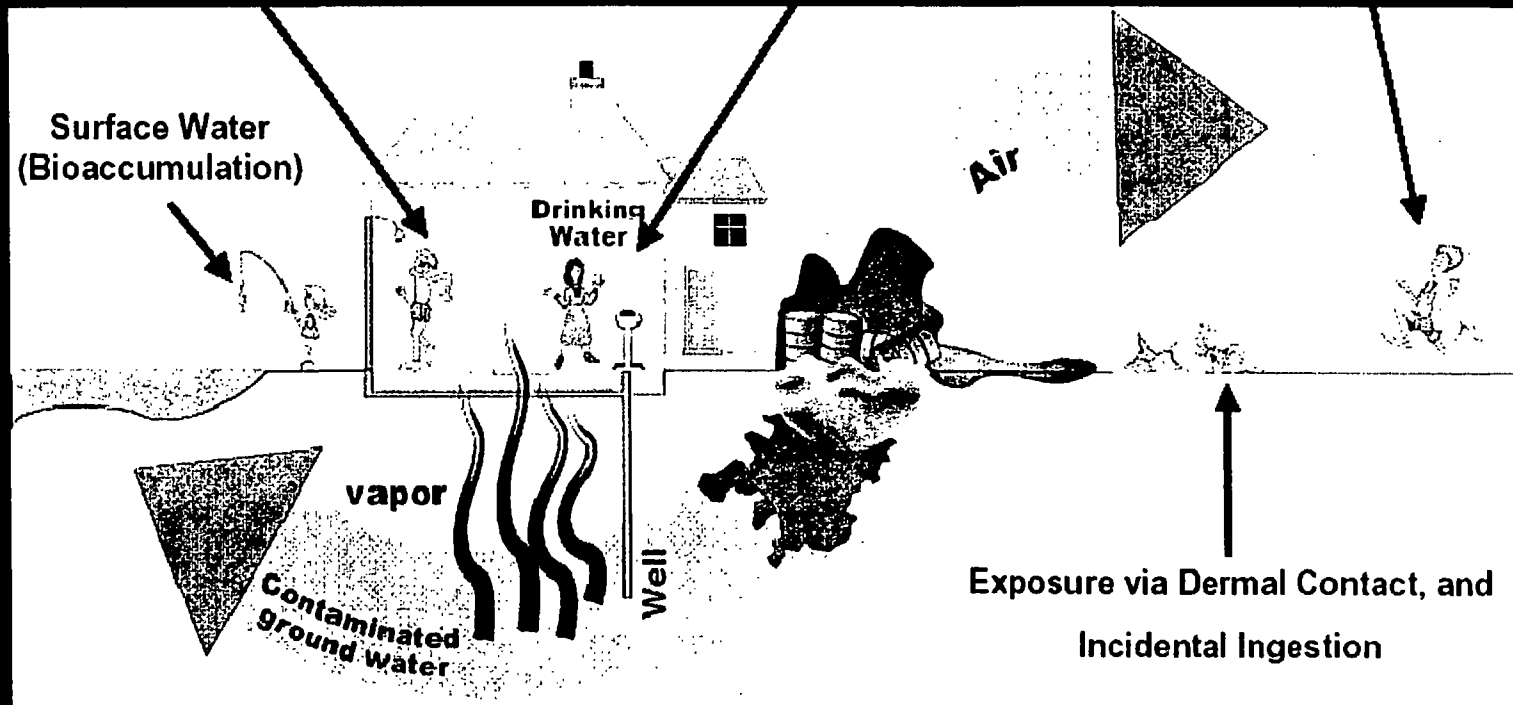
- Evaluation for Commercial or Industrial future use of the site
- Other scenarios are also evaluated (visitor, trespasser, construction worker, resident)
- Results of the HHRA were used to support
 - A “No Further Action” determination
 - Deed restriction
 - Specify site cleanup areas
 - Combination of cleanup and restriction

Potential Exposure Pathways

Exposure via Inhalation,
Dermal Contact, and
Ingestion

Exposure via
Ingestion

Exposure via Inhalation



Baseline HHRA

- Soil is primary medium of concern
 - Groundwater not used in the area and exposure potential is limited
 - Buildings are evaluated separately using existing standards
- Areas of Concern (AOCs)
 - Individual building footprints
 - Areas surrounding buildings
 - Overall site evaluation
- Chemicals of Potential Concern (COPCs)
 - PCBs and PAHs appear to be the primary COPCs, although other chemicals (pesticides, metals, dioxins, etc.) are in some AOCs
 - Pesticide is a COPC in and around Building 5

Baseline HHRA Soil Results

- Soils in most areas do not pose a risk
- Soils under Building 2 could pose a non-cancer hazard if the building is removed and the property used for a residence with children; not a hazard for any other scenario. PCB is the chemical of concern.
- Soils under Building 5 could pose unacceptable cancer risks and non-cancer hazards for residents or commercial/industrial tenants. Risks were primarily the result of a DDT hotspot, hazards were due to DDT and PCB. Lead slightly exceeds the residential standard, but is present within the background range for St Louis.
- The hotspot evaluation and site-wide evaluation support the individual building evaluations

Baseline HHRA Groundwater Results

- Although groundwater is not used as a drinking water source, several VOCs were found in one shallow groundwater monitoring well
- Potentially exposed populations include trench workers (direct contact, inhalation) or individuals in buildings (inhalation)
- Cancer risks and non-cancer hazards are very low for both populations

Baseline HHRA Buildings

- Asbestos and lead are likely to be present above regulatory standards in many buildings
- PCBs are likely to be present above regulatory standards in a few buildings

Baseline HHRA Conclusions

- Groundwater does not pose a risk for the intended reuse
- Soils pose limited risks that can be readily addressed via several different remedial options
- Prior to occupation, buildings should be thoroughly surveyed for contamination that could affect the proposed use of the buildings *lead (Pb) and pesticides*
- Given the caveats listed above, the HHRA supports the proposed reuse of the property for industrial/commercial purposes

The Early Transfer of the St. Louis Army Ammunition Plant

**John M. German
HQ U.S. Army Materiel Command**

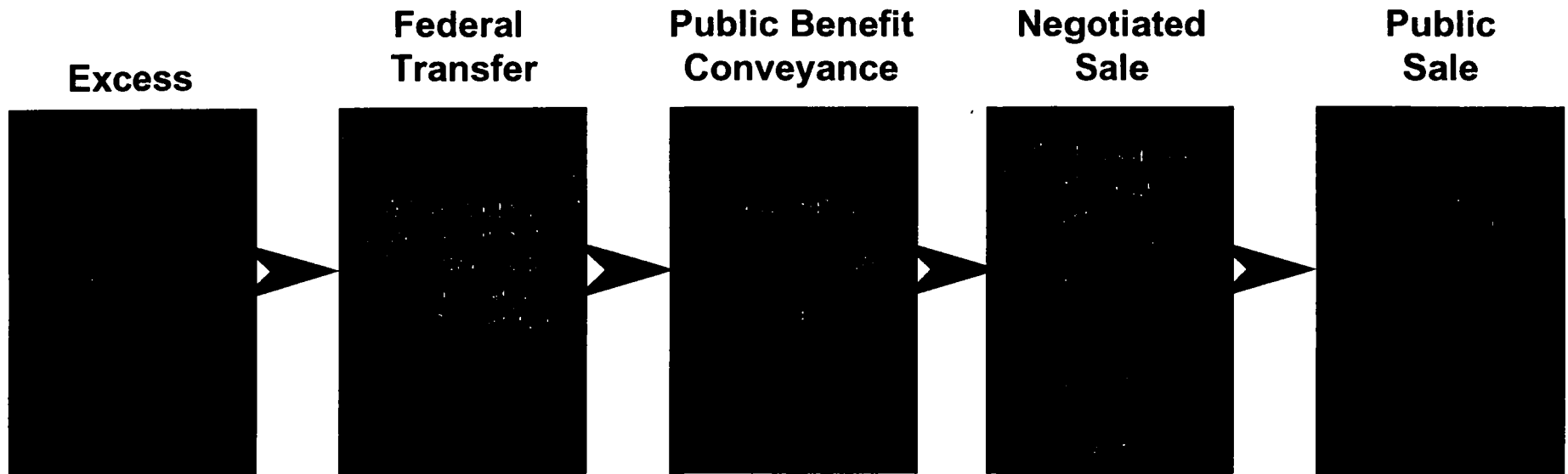
AGENDA

- **The Early Transfer Process**
- **Key Documents**
- **Where We Are**
- **What's Left to Be Done**

EARLY TRANSFERS

- **Key Players in the SLAAP Early Transfer**
 - **The Department of the Army**
 - **General Services Administration**
 - **St. Louis Development Corporation**
 - **Missouri Department of Natural Resources**
 - **Missouri Attorney General's Office**

GSA's Disposal Process



Homeless
Airports
Corrections
Education
Highway
Historic Monument
Parks & Recreation
Ports
Housing
Emergency Management
Public Health
Wildlife Conservation

EARLY TRANSFERS

- **Statutory Authority**
 - **CERCLA 120(h)(3)**
 - **1997 Amendments - 120(h)(3)(C)**
- **Requirements**
 - **Governor must approve**
 - **Property is suitable for intended use**
 - **Response actions are assured**
 - **Warranty will be delivered**
 - **Federal Responsibilities**

EARLY TRANSFERS

- **Property is suitable for its intended use**
 - **Use is consistent with the protection of human health and the environment**
 - **The deed transferring the property contains response action assurances**
 - **Public notification**
 - **Deferral will not delay remediation**

EARLY TRANSFERS

- **Response Action Assurances**
 - **Restrictions on the use of the property are in place to protect HHE**
 - **Restrictions in place to ensure remediation will not be disrupted**
 - **A schedule approved by the regulators for investigation and remediation**
 - **Financial assurances**

EARLY TRANSFERS

- **Restrictions to protect HHE include:**
 - Prohibition against residential land use
 - Prohibition on installing wells and access to GW
 - Prohibition against ground disturbing activities without MDNR approval
- **Restrictions in place to ensure remediation will not be disrupted**
 - Access rights
 - Non-interference clause
- **A regulators approved schedule**
 - FOSET enclosure
 - Consent Agreement
- **Financial assurances**
 - Army commitment to seek funding
 - Environmental insurance for the developer

Olis Williams states that City of St. Louis will not take title to the property unless they have a developer to transfer to.

KEY DOCUMENTS

- **Covenant Deferral Package**
 - **FOSET**
 - **Covenant Deferral Request**
 - **Public Comments**
 - **Offer to Purchase**
 - **Request for Proposals**
 - **Consent Agreement**
 - **Deferred Covenant Quitclaim Deed**

KEY DOCUMENTS

- **FOSET**

- **Site description and history**
- **Extent of known contamination**
 - **Notice of HS stored, released or disposed**
 - **Notice of petroleum products stored/released/dischposed**
- **Risk presented by known contamination**
- **Mechanisms in place to meet the conditions necessary to transfer early**
- **Declaration by the Army that the site is suitable for early transfer for its intended purpose**

KEY DOCUMENTS

- **CDR Package**
 - **FOSET**
 - **Covenant Deferral Request**
 - **Public Comments**
 - **Comments received**
 - **Notice**
 - **Army Responses**
 - **Offer to Purchase**
 - **Request for Proposals**
 - **Consent Agreement**
 - **Deferred Covenant Quitclaim Deed**
 - **Approval of Deferral Request**

WHERE WE ARE IN THE PROCESS

as of 03/04/04

- **FOSET - completed** *But not signed by Ray Fatz (DOA)*
- **Public Comments - completed** *- done*
- **Offer to Purchase - draft completed pending final review** *- with St Louis*

2nd • **Request for Proposals - pending*** *Release at end of March and late July.*

• **Deed - draft completed pending final review**

*Current
linch pin →* • **Consent Agreement - pending** *Must be between DOA + transferee (St. Louis) until a developer is identified.*

• **Approval of Deferral Request - pending**

• **Transfer of Title - September 04 (projected)**

• **Issuance of Covenant - upon site cleanup**

QUESTIONS ?

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Bob Holden, Governor • Stephen M. Mahfood, Director

www.dnr.state.mo.us

December 31, 2003

JAN 05 2004

SUPERFUND DIVISION

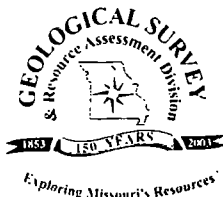
Ms. Libette Plunkett, Project Manager
HQDA, BRAC Atlanta Field Office
1347 Thorne Avenue SW, Bldg 243
Fort McPherson, GA 30330

RE: Department Management Briefing for the St. Louis Army Ammunition Plant (SLAAP)
Finding of Suitability for Early Transfer (FOSET)

Dear Ms. Plunkett:

I appreciate the Army responding to our request to brief our management on the early transfer of the SLAAP site. However, mid-January is a bit premature as I would prefer to have the complete and final version of the FOSET package reviewed by this office, and our Attorney General's office, prior to it being sent to the Governor. A briefing of department management following our review will provide them with all the information they may need to answer any questions or concerns the Governor may have upon receipt of the FOSET package. In addition to the FOSET package, and as discussed during the December 23, 2003, conference call, the department must have the Order with the City of St. Louis finalized and signed before the briefing and before you submit the FOSET package to the Governor.

As you may already be aware, the states' legislative session will begin in January. Due to the amount of activity associated with the legislative session, the Army should schedule the briefing at least 30 days in advance of a proposed meeting date. In order to make the briefing as productive as possible, the finalized FOSET package should be submitted to our office at least two weeks prior to briefing management so we have ample opportunity to review the material prior to the briefing. I believe providing the finalized FOSET package in advance of the briefing will help with the approval for the early transfer and increase our management's comfort level with the FOSET process. Given the Army's desire to expedite the transfer and the number of documents and issues to address, I suggest a minimum of weekly teleconferences between the project managers beginning the first week of January. This will allow us to discuss: the status of the FOSET package, transfer agreements, transfer schedule, orders, completion of the Site Specific Environmental Baseline Survey and the schedule for the management briefing.



Integrity and excellence in everything we do



Ms. Libette Plunkett
December 31, 2003
Page 2

If you have any questions regarding this letter or need any further clarification, you may contact me at (573) 526-2736. Direct written inquiries or comments to me at P.O. Box 176, Jefferson City, MO 65102-0176.

Sincerely,

HAZARDOUS WASTE PROGRAM



James R. Harris, Environmental Specialist III
Department of Defense Unit

JH:dd

- c: Mr. John German, AMC Office of Command Counsel
Mr. Tom Lorenz, US Environmental Protection Agency - Region VII
Major Arvesta Roberson, Army BRAC Office
Shelley A. Woods, Assistant Attorney General